

Winter Moth Survey Work Plan - Calendar Year 2011

Cooperator:	Kansas Department of Agriculture		
State:	Kansas		
Project:	Winter Moth and Gypsy Moth		
Project funding source:	Priority Survey <input type="checkbox"/> State Discretionary Survey <input checked="" type="checkbox"/> Other Line Item Pest <input type="checkbox"/>		
Project Coordinator:	Laurinda Ramonda		
Agreement Number	11-8453-1227-CA		
Contact Information:	Address:	PO Box 19282, Forbes Field Bldg 282, Topeka, Kansas 66619	
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This Work Plan reflects a cooperative relationship between the Kansas Department of Agriculture (KDA) and the United States Department of Agriculture (USDA), Animal and Plant Health Inspection Service (APHIS), Plant Protection and Quarantine (PPQ). It outlines the mission-related goals, objectives, and anticipated accomplishments as well as the approach for conducting a Winter Moth and Gypsy moth egg mass survey and the related roles and responsibilities of the Kansas Department of Agriculture and USDA-APHIS-PPQ as negotiated.

I) OBJECTIVES AND NEED FOR ASSISTANCE

The Winter Moth (*Operophtera brumata*) is an exotic invasive with no natural predators and was introduced to North America from Europe to Nova Scotia prior to 1950. It is now known to be in Massachusetts, Rhode Island, New Hampshire, Maine and Connecticut. Deciduous plants such as oak, maple, cherry, basswood, ash, white elm, crabapple, apple, blueberry and some spruces are susceptible.

The caterpillars feed on the flower and foliar buds and repeat this process which can greatly reduce harvest on fruit crops and cause defoliation of trees in high populations. All deciduous trees can be at risk of dying after four years of defoliation. The adult stage of the Winter Moth will emerge in late fall from the soil and remain active as long as the temperature remains mild.

Nurseries are a high risk pathway for the Winter Moth and also the Gypsy Moth (*Lymantria dispar*) to enter Kansas on plants received from the New England states. Data will be gathered for use in future control programs if the pests are found. The need to identify the range of the Winter Moth and Gypsy Moth is great and without financial assistance from USDA this survey cannot be carried out.

II) RESULTS OR BENEFITS EXPECTED

The Cooperator seeks to conduct a program which is expected to result in:

A. What results or benefits will be derived from the cooperative effort?

- Identification of pathways of introduction to limit future infestations.
- Survey and identification of the Winter Moth
- Survey for Gypsy Moth egg masses.
- Reduced risk of economic hardship to the agriculture, wood and nursery industry and ecological diversity.
- Protection to the state of Kansas from the introduction of Winter Moth and Gypsy Moth.
- Prevention of plant health restrictions.

III) APPROACH

What is the plan of action or approach to the work?

Trapping for the Winter Moth (*Operophtera brumata*) will occur from October to December at live plant dealers. One hundred fifty wing traps and lure will be utilized. Lure will be changed at approximately every 4 weeks. Traps will be removed in December.

Gypsy Moth (*Lymantria dispar*) egg masses will be visually surveyed for on spruce while at the live plant dealers.

Twenty five sites in 15 counties will be surveyed: Butler-2, Crawford-2, Cherokee-2, Douglas-2, Finney-1, Ford-1, Geary-2, Jefferson-1, Johnson-2, Kingman-1, Pratt-1, Riley-2, Sedgwick-2, Shawnee-2 and Wyandotte-2.

A. The Cooperator and APHIS Mutually Agree to/that:

- Utilize Cooperator and APHIS program funding, as outlined in the Financial Plan, within the authorized parameters to support survey, detection and objectives.
- Maintain a State Cooperative Agriculture Pest Survey committee that will meet at least once a year.
- Work together in carrying out field surveys, trapping and data collections, emphasizing pest and diseases that may pose an immediate risk to the agriculture of the state and United States.
- Have representation at national and/or Regional annual meetings.

1. What is the quantitative projection of accomplishments to be achieved?

- a. By activity or function, what are the anticipated accomplishments by month, quarter, or other specified intervals?**

- Trapping and visual surveys will occur from October to December.
- Traps checked, replaced if needed and lure changed monthly.
- Fact sheets, webpage, resources, and pest reporting will be continually updated as new information becomes available.
- Data will be entered into the NAPIS database when pest identification is confirmed and/or becomes available.
- GPS coordinates will be included with surveys.
- Survey and identification of the Winter Moth.
- Visually survey for Gypsy Moth egg masses and if found the egg masses will be sent into USDA for viability.
- Suspect specimens in traps will be forwarded to a qualified identifier.

b. What criteria will be used to evaluate the project? What are the anticipated results and successes?

- Pest detection survey activities completed.
- All data collected from the pest detection survey is entered into the NAPIS database.
- SPHD, SPRO, PSS, SSC meetings to keep updated on issues, if needed.
- Presence or absence of the Winter Moth
- Presence or absence of Gypsy Moth egg masses.
- Better knowledge of high risk sites.

c. What methodology will be used to determine if:

1. Identified needs are met:

- Survey completed within timeframe specified.
- Semi-annual and annual reports submitted.

2. Results and benefits are achieved

- Review of the NAPIS database to ensure that data from the pest detection activities have been entered.
- Review of the accomplishment reports, supporting outreach materials (if applicable), and maps.
- SPHD, SPRO, PSS, SSC meetings to keep updated on issues.

2. What type of data will be collected and how will it be maintained?

a. Address timelines for collection and recording of data.

All survey data from cooperative agreements involving pest surveys will be entered by the State Survey Coordinator or KDA staff into the NAPIS database to include but not limited to observation number, observation date, data source, state/county, site code, pest code, pest status, and survey method.

The data entry requirements are:

- Enter new national, state, and county records into NAPIS database within 48 hours of confirmation of a pest or pathogen identification by a recognized identifier.
- Non-time sensitive records, including negative data, must be entered into NAPIS within 2 weeks of confirmation.
- Negative data will be entered within 2 weeks of decommissioning a trap, obtaining the results from an identifier, or performing a laboratory assay.
- Survey data will be collected with GPS technology for internal pathway analyses. Survey maps will be developed from approved GIS mapping software.

b. How will APHIS be provided access to the data?

- Complete, accurate, and timely pest survey data will be entered into NAPIS using approved protocol and accessible.
- Semi-annual and annual survey reports submitted to Western Region.

B. The Cooperator will:

- Document locations by GPS coordinate.
- Equipment used in this survey will be maintained by cooperator upon completion of project.
- Conduct surveys in high risk nurseries from October to December 2011.
- Document locations by GPS coordinate.
- Supply GPS equipment.
- Provide KDA staff.
- Provide vehicle and fuel for travel for conducting survey and collecting data.

1. By function, what work is to be accomplished?

- Trapping for the Winter Moth will occur from October to December 2011.
- Visual survey for Gypsy Moth egg masses will occur from October to December 2011.
- Survey and trapping will be done with KDA full time employees.
- Data will be entered into the NAPIS database when pest identification is confirmed and/or becomes available.
- GPS coordinates will be included with surveys.
- Suspect specimens in traps will be sent to a qualified identifier.

2. What resources are required to perform the work?

- Qualified identifier for identification.
- KDA permanent staff will perform trapping and visual survey.
- GPS unit and map for locations.
- Provided by Cooperator, office space with associated services and utilities, computers and other office equipment for the use of Cooperator personnel. These include digital camera, GPS unit and computer with internet service. Computers

will be used for entering survey data into the state survey database and NAPIS database.

3. What numbers and types of personnel will be needed and what will they be doing?

- Permanent KDA staff will be setting and checking traps.
- Permanent KDA staff will be doing visual survey.
- Data acquired will be entered into NAPIS by State Survey Coordinator or KDA staff.
- Qualified identifier for specimen identification.

4. What equipment will be needed to perform the work? Include major items of equipment with a value of \$5,000 or more.

- a. **What equipment will be provided by the cooperator?** N/A
- b. **What equipment will be provided by APHIS?** N/A
- c. **What equipment will be purchased in whole or in part with APHIS funds?**
N/A
- d. **How will the equipment be used?** N/A
- e. **What is the proposed method of disposition of the equipment upon termination of the agreement/project?** N/A

5. Identify information technology equipment, e.g., computers, and their ancillary components.

Provided by KDA, office space with associated services and utilities, computers and other office equipment for the use of Cooperator personnel. These include digital camera, GPS unit, PDA and computer with internet service.

6. What supplies will be needed to perform the work?

- a. **What supplies will be provided by the Cooperator?**
 - Traps and lure
 - Replacement traps and lure
 - GPS units and digital camera
- b. **What supplies will be provided by APHIS?** N/A
- c. **What supplies will be purchased in whole or in part with APHIS funds?**
 - Supplies for the collection of specimens (office supplies, bags, alcohol)
 - Supplies for shipping specimens (boxes and shipping)

d. How will the supplies be used?

- Planning, implementation, data collection and data submission of survey.
- Pest detection survey work.
- Shipping of specimens to identifiers or labs.

e. What is the proposed method of disposition of the supplies with a cumulative value over \$5,000 upon termination of the agreement/project?

- There should not be any.

7. What procurements will be made in support of the funded project and what is the method of procurement (e.g., lease, purchase)?

- Traps and lure and replacements
- The Fiscal Department at the Kansas Department of Agriculture will provide most contracts.
- Most procurements will be made by purchase order.
- Some procurements will be made by reimbursable personal expense.

8. What are the travel needs for the project?

a. Is there any local travel to daily work sites? Who is the approving official? What are the methods of payment? Indicate rates and total costs in the Financial Plan.

- Travel will be required to survey sites by use of a KDA or rental vehicle.
- The KDA Plant Protection and Weed Control Plant Program Manager is the approving official. Costs are included in the financial plan.

b. What extended or overnight travel will be performed (number of trips, their purpose, and approximate dates). Who is the approving official? What is the method of payment? Indicate rates and total cost in the Financial Plan.

- Four nights travel is expected for the state entomologist to screen traps for suspects.
- The KDA Plant Protection and Weed Control Plant Program Manager is the approving official. Costs are included in the financial plan.

9. Reports:

- a. Submit all reports to the APHIS Authorized Department Officer's Designated Representative (ADODR). Reports include:**
- 1. Narrative accomplishment reports in the frequency and time frame specified in the Notice of Award, Article 4.**

2. Federal Financial Reports, SF-425 (replaces SF-269 October 1, 2009) in the frequency and time frame specified in the Notice of Award, Article 4.

10. Are there any other contributing parties who will be working on the project?

a. List Participating Agency/Institution:

- KDA
- USDA-APHIS

b. List all who will work on the project:

- KDA-state entomologist and season/temporary employee
- USDA-APHIS

c. Describe the nature of their effort:

- KDA-survey
- USDA-APHIS-pest confirmation identification

d. Contribution:

- KDA-surveying, data collection, pest screening
- USDA-APHIS-identification of pests.

C. APHIS Will:

- Review data.
- Provide funds to the Cooperator to cover costs outlined in the Financial Plan.
- Make arrangements for Taxonomic support in identification and sorting.
- Provide training, when necessary.

1. What equipment will be needed to perform the work? Include major items of equipment with a value of \$5,000 or more.

a. Will Equipment be loaned or provided by APHIS? ☐ Yes ☒ No (If Yes, please list:

b. How will the equipment be used? N/A

IV) GEOGRAPHIC LOCATION OF PROJECT

A. Is the project statewide or in specific counties, townships, and/or national or state parks? (list the names of all counties, townships, and/or national or state parks, and tribal areas that apply)

Possible counties: Butler, Crawford, Cherokee, Douglas, Finney, Ford, Geary, Jefferson, Johnson, Kingman, Pratt, Riley, Sedgwick, Shawnee and Wyandotte.

B. What type of terrain (e.g., cropland, rangeland, woodland) will be involved in the project? The type of terrain involved in this project will be public and private areas where nursery stock may have been contaminated with the Winter Moth and Gypsy Moth egg masses.

C. Are there any unusual features which may have an impact on the project or activity such as rivers, lakes, wild life sanctuaries, commercial beekeepers etc?
Some areas might have disruption through human contact.

D. Identify the kind of data to be collected:

The kinds of data to be collected will include, but not limited to, observation number, observation date, data source, state/county, site code, EPA pest code, pest status and survey method.

E. Establish criteria to evaluate the results and successes of the project:

1. Results:

- Pest detection survey activities for the project completed.
- All data collected from the pest detection survey is entered into the NAPIS database.
- Maps of the pest detection survey activities are produced to aid in planning of future pest detection surveys, pathway risk analysis, and outreach activities.
- State CAPS and KDA meetings to keep updated on issues.

2. Successes:

- No pests found that would require regulatory action.
- Increased knowledge of high risk pathway locations.

F. Methodology used to determine if the results and benefits are achieved:

1. Identified needs are met:

- Survey completed in timeframe specified.

2. Results and benefits are achieved:

- Review of the NAPIS database to ensure that data from the pest detection activities have been entered.
- Review the accomplishment reports, supporting outreach materials (if applicable), and maps.
- State CAPS and KDA meetings to keep updated on issues.

V) DATA COLLECTION AND MAINTENANCE

1. All survey data from cooperative agreements involving pest surveys will be entered by the State Survey Coordinator or KDA staff into the NAPIS database using approved protocol.

Data entry guidance appears below.

- First record for the State and/or County will be entered within 48 hours of confirmation of identification by a qualified identifier.

- All records are to be entered into the NAPIS database by December 31 of the year of survey so these data can be included in the yearly Plant Board Report.
- Survey data will be collected with GPS technology (WGS84 datum is the standard)

VI) TAXONOMIC SUPPORT

A. Person or Institution that will screen targets (Name & Contact Information)

State of Kansas Entomologist
PO Box 19282, Forbes Field, Bldg. 282
Topeka, KS 66619
(782) 862-2180

OR

B. ☒ Request for taxonomic support.

Samples will be sorted to species. Any necessary sample verifications and identifications will be done by an approved entomologist or USDA identifier.

VII) SIGNATURES

ROAR

Date

ADODR

Date

Detailed Financial Plan

PROJECT: Winter Moth and Gypsy Moth

COOPERATOR NAME: Kansas Department of Agriculture

AGREEMENT NUMBER: 11-8453-1227-CA

TIME PERIOD: January 1, 2011-December 31, 2011

Financial Plan must match the SF-424A, Section B, Budget Categories

ITEM	APHIS FUNDS	COOPERATOR FUNDS (Show even if zero)	TOTAL
PERSONNEL:			
KDA staff 120.4 hours @ \$25/hr	\$3,010	0	\$3,010
KDA staff 21 hours @ 25/hr	0	\$525	\$525
Subtotal	\$3,010	\$525	\$3,535
FRINGE BENEFITS:			
22% of salary of permanent employees	\$662	\$116	\$778
Subtotal	\$662	\$116	\$778
TRAVEL:			
KDA staff miles 800 @ \$0.50/mile	\$400	0	\$400
Pick up rental for 2 weeks @ \$350/week**	\$700	0	\$700
Lodging 4 nights @ \$85/night	\$340	0	\$340
Meals for overnight travel @ \$39/day x 8 days	\$312	0	\$312
Subtotal	\$1,752	\$0	\$1,752
EQUIPMENT			
Subtotal	0	0	0
SUPPLIES			
Alcohol, alcohol proof pens, Ziploc bags, shipping boxes, etc	\$263	0	\$263
Traps & lure	\$563	0	\$563
Fuel 1,247 miles/15mpg x \$3.50/gallon **	\$291	0	\$291
Subtotal	\$1,117	0	\$1,117
CONTRACTUAL			
Subtotal	0	0	0
OTHER			
Shipping	\$400	0	\$400
Subtotal	\$400	0	\$400

TOTAL DIRECT COSTS	\$6,941	\$641	\$7,582
INDIRECT COSTS (21.80% on Total Direct Cost of salary and fringe benefits)*	\$800	\$140	\$940
TOTAL	\$7,741	\$781	\$8,522
Cost Share Information	91%	9%	

* Kansas' Negotiated Cost Rate (Salary + Fringe Benefits x %=Indirect Cost)

** There is a shortage of state vehicles. We give the option of renting a vehicle or using personally owned vehicles. If renting we pay for the fuel and if a personal vehicle is used we pay mileage. Some temporary staff do not live near a state contracted rental car agency or will not be working long enough to make it useful.